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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,226	06/11/2001	Jeff Mazereeuw	57761.000137	8540

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EXAMINER

WEST, JEFFREY R

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,226

Applicant(s)

MAZEREEUW ET AL.

Examiner

Jeffrey R. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "104". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

On page 2, line 11, "a system a system" should be ---a system---.

On page 5, line 16+ and page 6, lines 6+ and 26+, Applicant lists several registered trademarks, which are not indicated as such (i.e. UNIX®, registered trademark of The Open Group and Visual BASIC®, registered trademark of Microsoft Corporation)

On page 10, line 30, "client devices" is incorrectly labeled "126" rather than "104" as it is labeled on page 10, line 25.

On page 11, line 10, "form the monitoring devices" should be ---from the monitoring devices---.

Appropriate correction is required.

Claim Objections

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3. Claims 17-22 are objected to because of the following informalities:

Claims 17-21 are objected to because of incorrect dependency since they recite methods dependent on claim 1, while claim 1 is a system. It is suggested that claims 17-21 be dependent on claim 12 rather than claim 1.

Claim 22 is objected to because it recites both the limitations of "wherein the first and second communication networks are the Internet" and "wherein the first communication network and the second communication network comprise the same network." If the first and second communication networks are the Internet, then they are also the same. Therefore, the second limitation is not necessary.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1, 3-5, 10, 12, 14-16, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,236,332 to Conkright et al.

Conkright discloses a control and monitoring system comprising monitoring equipment (i.e. one or more remote units), operatively connected to a device such as a utility system (column 1, lines 31-32), that measures the operating current of the device (column 8, lines 18-20). Conkright discloses operatively connecting the monitoring equipment to a host computer through a first communication network (i.e. wireless service gateway with subscriber software) (column 3, lines 53-61) as well as operatively connecting a remote customer interface terminal to the host computer through the same wireless service gateway and subscriber software, or the Internet (column 3, lines 22-34) wherein the remote customer interface receives notification of operating conditions of the monitored utility device (column 3, lines 29-52 and column 4, lines 43-54) as well as allows the user to control the monitored device (column 3, lines 38-43 and column 6, lines 32-38). Conkright also discloses that the host computer contains a server database that is connected to the communication networks and accessible by the customer interface (column 3, lines 44-52 and Figure 1).

Although not specifically disclosed, it is considered inherent that in order for the customer subscriber to communicate with the host computer and server database there must be some corresponding protocol at the host computer and therefore the access to this protocol is implemented using an application service provider (see *FOLDOC: Free On-Line Dictionary of Computing*, Definition of "application service provider").

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konkright et al. in view of U.S. Patent No. 5,406,495 to Hill.

As noted above, Konkright teaches all of the features of the claimed invention except for including monitoring equipment for measuring the voltage of the utility device.

Hill teaches a substation load distribution monitoring system comprising remote data units for sensing operating conditions of the power equipment (column 3, lines 20-29) including periodic voltage and current data (column 1, lines 48-55). Hill also teaches that the remote data units communicate with a host computer over a communication network to transfer measured data (column 3, lines 4-17).

It would have been obvious to one having ordinary skill in the art to modify the invention of Konkright to include monitoring equipment for measuring the voltage of the utility device, as taught by Hill, because Konkright teaches a system for use in a plurality systems including a system employing condition monitoring over an AC power line (column 7, lines 9-11) and Hill suggests that the combination would have provided an improved-accuracy and simplified method of remote monitoring in a

power system (column 1, lines 7-15), and therefore provided higher protection, by monitoring the voltage and current rather than just the current (column 6, lines 48-66).

8. Claims 7-9 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conkright et al. in view of U.S. Patent No. 6,006,171 to Vines et al.

As noted above, Conkright teaches all of the features of the claimed invention except for including automatic reporting, maintenance scheduling, and administrative tracking programs in the customer interface device.

Vines teaches a dynamic maintenance management system comprising a monitoring and analysis process for sending and receiving process control data to and from sensors and devices over a communication bus (column 3, lines 33-37). Vines teaches sending this information to a DMM configurator that processes the information (column 3, lines 53-65) to automatically provide reports describing device operation, preventive maintenance schedules, and administrative tracking (i.e. creating work orders including worker assignment) (column 5, lines 17-29 and 50-61 and Figures 3-9).

It would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include automatic reporting, maintenance scheduling, and administrative tracking programs in the customer interface device, as taught by Vines, because Conkright does include presenting information to a worker for fixing a fault that has occurred (column 9, lines 15-34), and, as suggested by Vines, the

combination would have provided more detailed information to allow an operator to make better informed decisions and devise proactive planning, increased performance and predictability of equipment and operations, reduced maintenance costs, improved reliability, and avoided costly failures (column 2, lines 12-31 and column 5, lines 30-34).

9. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konkright et al. in view of U.S. Patent No. 5,712,896 to Lee et al.

As noted above, Konkright teaches all of the features of the claimed invention except for including an expertise database.

Lee teaches a method for diagnosing a fault comprising software that is executed by a hardware function to maintain/repair operation the hardware (column 3, lines 1-4) wherein the state of a fault occurring is detected by either a hardware or software fault detection function (column 3, lines 5-12). Lee also teaches that a fault message is outputted from a switching system to a user via a fault diagnosis expert system and a user matching function (column 3, lines 21-23) that communicates, via an inference engine and a multimedia or graphic interface, questions to the user relating to the diagnosis using a corresponding knowledge base (i.e. database) (column 3, lines 36-38 and 41-49). Lee then teaches that after obtaining the answers to the questions, the diagnosis is completed and the expert system outputs a determination result of the fault diagnosis (column 4, line 56 to column 5, line 3).

It would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include an expertise database, as taught by Lee, because, as suggested by Lee, the combination would have provided a method for determining the type of fault that has occurred without the need of an expert in the field by providing interactive questions that guide the user through the process, and therefore allowed the diagnosis to be conducted immediately by an unskilled worker (column 1, lines 54-58).

10. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conkright et al. in view of Hill, Vines, Lee, and International Publication Number WO 00/04427 to Parsons.

As noted above, Conkright teaches many of the features of the claimed invention including specifying that the host computer connect to the customer interface through the Internet, but does not teach including monitoring equipment for measuring the voltage of the utility device, including automatic reporting, maintenance scheduling, and administrative tracking programs, including an expertise database, or specifying that the connection between the monitoring equipment and the host computer be the Internet.

Hill teaches a substation load distribution monitoring system comprising remote data units for sensing operating conditions of the power equipment (column 3, lines 20-29) including periodic voltage and current data (column 1, lines 48-55). Hill also

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teaches that the remote data units communicate with a host computer over a communication network to transfer measured data (column 3, lines 4-17).

Vines teaches a dynamic maintenance management system comprising a monitoring and analysis process for sending and receiving process control data to and from sensors and devices over a communication bus (column 3, lines 33-37). Vines teaches sending this information to a DMM configurator that processes the information (column 3, lines 53-65) to automatically provide reports describing device operation, preventive maintenance schedules, and administrative tracking (i.e. creating work orders including worker assignment) (column 5, lines 17-29 and 50-61 and Figures 3-9).

Lee teaches a method for diagnosing a fault comprising software that is executed by a hardware function to maintain/repair operation the hardware (column 3, lines 1-4) wherein the state of a fault occurring is detected by either a hardware or software fault detection function (column 3, lines 5-12). Lee also teaches that a fault message is outputted from a switching system to a user via a fault diagnosis expert system and a user matching function (column 3, lines 21-23) that communicates, via an inference engine and a multimedia or graphic interface, questions to the user relating to the diagnosis using a corresponding knowledge base (i.e. database) (column 3, lines 36-38 and 41-49). Lee then teaches that after obtaining the answers to the questions, the diagnosis is completed and the expert system outputs a determination result of the fault diagnosis (column 4, line 56 to column 5, line 3).

Parsons teaches an internet utility interconnect means, and corresponding method, comprising operating a remote control and monitoring system that replicates data between a host computer located at a central server site and a set of automation nodes located at a remote site wherein the means to link the data collected for subsequent access is through the Internet (page 6, lines 15-32).

It would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include monitoring equipment for measuring the voltage of the utility device, as taught by Hill, because Conkright teaches a system for use in a plurality systems including a system employing condition monitoring over an AC power line (column 7, lines 9-11) and Hill suggests that the combination would have provided an improved-accuracy and simplified method of remote monitoring in a power system (column 1, lines 7-15), and therefore provided higher protection, by monitoring the voltage and current rather than just the current (column 6, lines 48-66).

It would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include automatic reporting, maintenance scheduling, and administrative tracking programs in the customer interface device, as taught by Vines, because Conkright does include presenting information to a worker for fixing a fault that has occurred (column 9, lines 15-34), and, as suggested by Vines, the combination would have provided more detailed information to allow an operator to make better informed decisions and devise proactive planning, increased performance and predictability of equipment and operations, reduced maintenance

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costs, improved reliability, and avoided costly failures (column 2, lines 12-31 and column 5, lines 30-34).

It would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include an expertise database, as taught by Lee, because, as suggested by Lee, the combination would have provided a method for determining the type of fault that has occurred without the need of an expert in the field by providing interactive questions that guide the user through the process, and therefore allowed the diagnosis to be conducted immediately by an unskilled worker (column 1, lines 54-58).

Further, it would have been obvious to one having ordinary skill in the art to modify the invention of Conkright to include specifying that the connection between the monitoring equipment and the host computer be the Internet, as taught by Parson, because, as suggested by Parsons, the combination would have allowed the web server to be changed by authorized users and therefore enabled residents and other subscribers to conveniently turn on the connected devices whenever desired (page 4, lines 13-15 and page 8, lines 4-15).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. 6,297,742 to Canada et al. teaches a machine monitor with status indicator.

U.S. Patent No. 5,124,908 to Broadbent teaches a user interactive expert machine controller.

U.S. Patent No. 5,684,718 to Jenkins et al. teaches a method and apparatus for monitoring the operation of an electric generator using an expert database.

FOLDOC: Free On-Line Dictionary of Computing, Definition of "application service provider".

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw
January 3, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800